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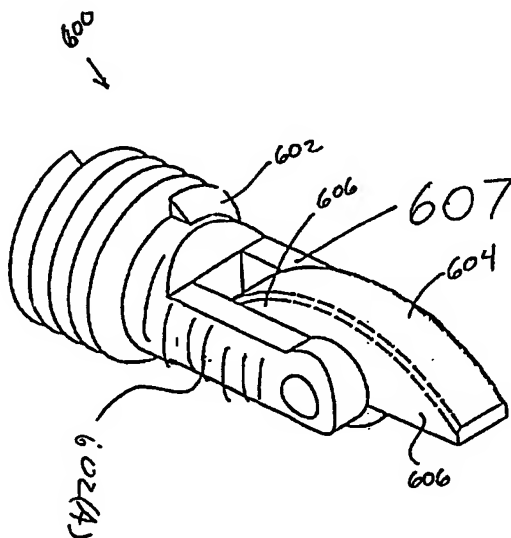
— with international search report

(88) Date of publication of the international search report:
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **BONE FASTENERS AND METHOD FOR STABILIZING VERTEBRAL BONE FACETS USING THE BONE FASTENERS**

(57) Abstract: A bone fastener for stabilizing bone fragments includes a single or multiple components coupleable with one another and displaceable to a locked position of the bone fastener.



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INTERNATIONAL SEARCH REPORT

National Application No

PCT/U 2/41444

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61B17/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 485 531 A (KING GEORGE S ET AL) 18 October 1949 (1949-10-18) column 1, line 1-3; claim 1; figures 1-3 ---	1-5,14, 15,18,19
X	WO 01 95818 A (YEUNG JEFFREY E) 20 December 2001 (2001-12-20) abstract; figures 15,16 page 13, line 10-24 page 14, line 25-27 ---	1-5,14, 15, 18-21, 24,25, 29,30
X	FR 2 787 010 A (HURE GUY) 16 June 2000 (2000-06-16) abstract; figures 4,6,7 page 5, line 7-14 ---	1,6-13
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
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- "O" document referring to an oral disclosure, use, exhibition or other means
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"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&" document member of the same patent family

Date of the actual completion of the international search

2 April 2003

Date of mailing of the international search report

03. 07. 2003

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INTERNATIONAL SEARCH REPORT

National Application No

PCT/U 2/41444

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 511 051 A (WILLIAM DZUS) 13 June 1950 (1950-06-13) column 2, line 48-51; figures 1,7,9 ---	1,2,14, 15,18, 19,35
X	US 6 258 091 B1 (SHEARIN ALAN ET AL) 10 July 2001 (2001-07-10) abstract; figures 2,5,6 ---	1,2, 10-12, 14,15, 18,19,24
X	GB 2 323 533 A (KARNEZIS IOANNIS) 30 September 1998 (1998-09-30) abstract; figures 1,2,5,6 page 2, line 27 -page 3, line 1 ---	1,6,7, 10,13,14
X	EP 1 004 280 A (TWENTY ONE INC) 31 May 2000 (2000-05-31) abstract; figure 14B ---	1,6-8
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X	US 2001/011173 A1 (LERCH KARL-DIETER) 2 August 2001 (2001-08-02) abstract; figures 2,4,6 paragraphs [0019]-[0022] ---	1,16-21, 24,25
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INTERNATIONAL SEARCH REPORT

International Application No.
PCT/US 02/41444

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 36-39
because they relate to subject matter not required to be searched by this Authority, namely:
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-26, 35, 40

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-26, 35,40

bone fastener with two portions, one with a shaft and the other one with a hollow body

1.1. Claims: 1-5, 14-15,18-19, 24
Rotatable anchor

1.2. Claims: 6-9
Slotted sleeve and expanding parts.

1.3. Claims: 10-13
Fastener with an anchoring portion with an inner hole.

1.4. Claims: 16-17
Press fit assembly.

1.5. Claims: 20-21, 25
Assembly with spikes.

1.6. Claims: 22-23
Assembly with a curved cylindrical body.

1.7. Claim : 26
Assembly with ratchet mechanism.

1.8. Claim : 35
Screw with a cylindrical body, a shaft and a head.

2. Claims: 27-30,40

Assembly with jaws pivotally coupled at one ends of the jaws.

3. Claims: 31-34,40

Assembly with parts made of memory shape alloy.

Please note that all inventions mentioned under item 1, although not necessarily linked by a common inventive concept, could be searched without effort justifying an additional fee.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2002/41444

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